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ZI Z VR30 COLD AIR INTAKE SYSTEM INSTALLATION MANUAL



This Installation Manual is intended for the following models:2023+Nissan Z

PROLOGUE:

Study these instructions completely before proceeding to assembly. The installer must have a thorough knowledge of automotive systems operation. If unfamiliar with any of the concepts outlined in this instruction, we recommend the installation be completed by a qualified professional.

WARNING!

Extreme caution should be taken when performing maintenance or performance upgrades to your vehicle. Please observe and abide by any Warning or Caution labels placed on the various components and tools used when servicing your vehicle. If you have any questions regarding installation or the various components included with the Z1 Motorsports Z (VR30) Cold Air Intake System, consult with a Professional Mechanic or contact Z1 Motorsports for more information.

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PARTS INCLUDED:

Item	Quantity	Description
1	1	Intake Air Box, Driver
2	1	Intake Gasket, Driver
3	1	Air Box Bracket, Driver
4	1	Intake Tube, Driver
5	1	Intake Air Box, Passenger
6	1	Intake Gasket, Passenger
7	1	Air Box Bracket, Passenger
8	1	Intake Tube, Passenger
9	2	MAF Adapter Plate
10	2	Intake Air Filter
11	4	Isolating Mount, Rubber, M6
12	4	Isolating Mount, Insert, M6
13	4	M6x12mm Flange Bolt – Brackets to Boxes
14	4	SEMS Screw, M6x20mm - MAF to MAF Adapter Plates
15	4	M6 Flanged Nyloc Nut - MAF to MAF Adapter Plates
16	4	M6 Washer
17	4	Large Worm Drive Hose Clamp
18	2	Small Worm Drive Hose Clamp
19	1	Spring Hose Clamp, PCV Hose Adapter to Inlet
20	2	Z1 Aluminum Badge

TOOLS REQUIRED:

- Hydraulic Jack
- (2) 2-Ton (or greater) Jack Stands
- Ratchet
- Ratchet Extension(s)

- 10mm Socket/Wrench
- 8mm Nut Driver
- Needle Nose Pliers
- Flat-head Screwdriver

SAFETY REQUIREMENTS:

- Always wear safety glasses and any necessary protective garments. If using any fluids, chemicals, or solvents, a respirator is recommended.
- Always turn the ignition to the OFF position and disconnect the NEGATIVE battery terminal.
- Always use properly rated jack stands when working under your vehicle.
- Always keep limbs and parts away from moving drivetrain parts.
- Only operate drivetrain in safe space and well-ventilated areas.

BEFORE YOU BEGIN:

Remove contents from the Z1 Motorsports Z (VR30) Cold Air Intake System and verify that ALL necessary hardware is present.

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PROCEDURE:

- 1. Place the transmission in Park position (or in Reverse gear if equipped with a manual transmission). Apply the parking brake.
- 2. Unlatch and raise vehicle's hood. Apply hood prop.
- 3. Disconnect the electrical connector at the back of each air box connecting to the MAF sensor. Unclip MAF sensor harness from OEM air box (shown with arrow below).



- 4. Remove (2) screws securing each intake air box to the chassis (circled above). Retain the screws as they will be reused later.
- 5. Disconnect the clamps where each MAF housing on the back of each airbox that connects to each turbo inlet tube. The OEM inlet tube uses a unique clamp and requires you to "unseat" it in three locations using a flat-head screwdriver or pry bar (shown below). Please see the note on the following page.



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<u>Note</u>: Pictures 1 & 2 show the clamp in the "closed" position. To disconnect, press the inlet tube towards the MAF housing, this will move the retention clip down as shown in picture 3. Then, using a flat-head screwdriver gently pry both sides of the clip outwards, as shown in picture 4. This will slide the ends of the clip into their "open" position, as shown in picture 5. Once both sides of the retention clip are in the open position (picture 6), you can remove the MAF housing. The pictures shown below are just the inlet tube and MAF housing and were taken off the car to better show how the clamp functions.

- 6. Once the clamps are removed/unseated, carefully pull up on each air box and remove them from the vehicle.
- 7. Remove the (2) mounting screws connecting the MAF sensor housing to the OEM air box. Set MAF housing aside. MAF housing is shown below with arrow.



8. Remove the mounting screw and OEM air box support bracket on passenger side of vehicle (shown below).

- 9. Loosen each clamp where turbo inlet tube connects to turbo. These clamps are worm gear clamps and can be hard to reach, you may have to use a combination of extensions and/or a swivel socket.
- 10. Remove both inlet tubes. Remove the hose clamp from the vacuum line attached to the passenger side's inlet tube, then remove the hose (as shown below).
- 11. Remove the barb fitting from the OEM passenger side inlet tube and install fitting into new Z1 passenger intake tube (as shown below). Secure with the supplied pinch hose clamp.



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12. Attach the vacuum line that was removed in step #12 to fitting on passenger Z1 intake tube. Place a small worm gear hose clamp on each end and install Z1 intake tubes on their respective turbo inlet (as shown). The intake tubes can be hard to install. Silicone spray is highly recommended. You may need to remove your undershroud to get a better view to see if the intake tube is fully seated on the turbo inlet. Tighten hose clamps at turbo inlet. Place a large worm drive hose clamp on each intake tube inlet.



13. On the driver's side of the vehicle there is a bracket and AC line in front of the intake tube that needs to be bent or rotated for clearance on the air box. You can choose to either loosen the bolt and rotate the bracket away from the engine, or slightly bend the bracket towards the front of the car. The bend is very slight and is shown below.



- Locate the Z1 filters, both MAF adapter plates, both MAF adapter plate gaskets, (4) M6 x 20mm bolts, and (4) M6 nylon locknuts.
- 15. Install a MAF adapter plate gasket onto each MAF adapter plate. Then place adapter plate onto MAF housing making sure to line up the bolt holes and notch on the plate and MAF housing (as shown below). Secure the MAF adapter plate to the MAF housing with (2) M6 bolts and (2) locknuts on each.





Part number on this side of adapter plate

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- 16. Install a filter onto each MAF housing, but do not fully tighten the clamp yet (as shown at right).
- 17. Locate both airbox brackets, (4) M6 x 12mm screws, (4) rubber isolating mounts, (4) isolating mount inserts, and (4) M6 washers.
- 18. The air filters will need to be clocked to properly fit in the air box. Insert the filter assembly into the air box (you do not need to install it in the gasket's groove yet), clock the filter so it fits properly, then remove the assembly and tighten the clamp on the filter.
- 19. Once the filter is clocked, carefully insert filter assembly into the air box making sure the gasket properly seats on the air box to secure it.
- 20. Install the brackets onto the air boxes with (2) M6 x 12mm screws on each. The brackets and boxes are shown in the image below as reference for which side is which.





- 21. Install a rubber isolating mount into each slotted end of the air box brackets. Install an isolating mount metal insert into the bottom of each rubber isolating mount (as shown at right).
- 22. Insert each air box assembly into their corresponding inlet tubes (tubes pictured in step #13). Tighten hose clamps.
- 23. Attach each air box bracket to vehicle using (2) screws on each side that were removed in step #4.
- 24. Reconnect each MAF sensor connector to each MAF sensor.
- 25. Properly lower vehicle from jack stands.
- 26. Inspect vehicle for loose tools/items
- 27. Start vehicle. While at idle, check for leaks or faulty operation of air intake kit.
- 28. Lower hood of vehicle.

29. Perform a final test drive of vehicle.



Completed assembly of Nissan Z Cold Air Intake should look as shown:



<u>END</u>

Additional Technical Support:

Contact Z1 Motorsports at info@z1motorsports.com Or call 770-838-7777 between 9am and 6pm ET

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